Form K1810
(347)

This book should be carefully preserved for reference

INSTRUCTIONS

FOR USING

SINGER SEWING MACHINES

No. 99

OSCILLATING HOOK, FOR FAMILY USE

When requiring Needles, Oil, Parts or Repairs for your machine

Look for the Red "S" There are Singer Shops in every City

THE SINGER MANUFACTURING CO.

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Printed in Great Britain

WARNING

It is essential that your machine should be kept well oiled, in accordance with the instructions given on pages 14 and 15 of this book.

Singer Oil, which is specially prepared for sewing machines, is supplied in tins which have the well-known Singer Red "S" printed thereon.

Singer Needles are stamped with the Company's Trade Mark "Simanco" and are sold in green packets which also bear the Singer Red Letter "S."

Needles in Containers marked "For Singer Machines" are not Singer made needles.

Should your machine require overhauling or repair, apply only to a Singer Shop or Singer Salesman, otherwise you will risk its being irretrievably damaged.

Every description of sewing machine repaired, or exchanged.

To all whom it may concern :

The placing or renewal of the trade-mark " SINGER " or any other of the trade-marks of The Singer Manufacturing Company (all of which are duly Registered Trade-marks) on any machine that has been repaired, rebuilt, reconditioned, or altered in any way whatsoever outside a Singer factory or an authorised Singer agency is forbidden.

SINGER SERVICE

Now that you have purchased your new Singer Sewing Machine we do not want you to feel that your relations with us have come to an end.

The following instructions are worded so that they may be easily understood by everyone, and we would suggest that you study them carefully in order that you may obtain the fullest use and pleasure from your sewing machine. If, however, you require further assistance we would ask you to call at the local Singer Shop where advice will always be willingly given in the use of any Singer Machine and its Attachments.

We hope, too, that you will make the Singer Shop your headquarters for sewing supplies and service. Only there, or through Singer authorised representatives, can you secure genuine Singer oil, cotton, needles, etc.—all of which are so important in obtaining the best results from your sewing machine.

HAVE YOU SEEN THE SINGER MOTOR?

One screw attaches it to your machine

Cuts out all fatigue!
Both hands free to guide work!
Makes sewing a pleasure!
Better work done in half the time!

And then, after dark, there is the

SINGERLIGHT

which, by showing the stitching more clearly, prevents eyestrain and saves time and annoyance when threading the needle

Any Singer Shop or Singer Salesman will tell you all about them

The Hand Attachment

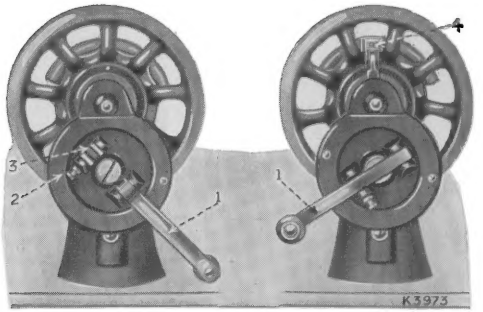


Fig. 1. Fig. 2.

WHEN the cover is removed from the machine, the hand attachment will be found to be out of working position, as shown in Fig. 1. To operate the machine, pull the small spring stud (2, Fig. 1) and turn the handle back until the lever (1, Fig. 1) enters the socket (3, Fig. 1); also see that the hinged finger (4, Fig. 2) is turned back between the spokes of the wheel. The machine will then be ready for working, as shown in Fig. 2.

Before replacing the cover, the lever should be disengaged, and the handle placed in the position shown in Fig. 1.

Balance Wheel Stop Motion

This device allows the balance wheel to run free, so that bobbins may be wound without operating the mechanism. To loosen the wheel, hold it with the left hand, and with the right hand turn the stop motion screw over towards you, as shown in Fig. 3.

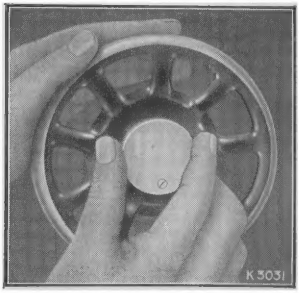


Fig. 3.

To Operate the Hand Machine

Tighten the balance wheel and place a piece of material under the presser foot (8, Fig. 5). Then lower the latter by means of the lifter (4, Fig. 5). Now **turn the handle over from you** to work the machine, without its being threaded, until you are accustomed to guiding the material with the left hand.

The advantages of an electric machine, are: Higher speed, and, both hands being free, a greater variety of work. A Singer Motor may be applied to your machine at any time. (*See page 2 of this book.*)

To Ensure Perfect Action of the Machine

Do not work the machine with the presser foot lowered or with the needle threaded, except when sewing.

The slide (4, Fig. 6) must be kept closed.

To Set the Needle

(See Fig. 4)

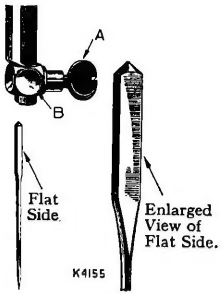


Fig. 4. Positioning Needle in Needle Clamp.

Raise the needle bar to its highest point and loosen the thumb screw (**A**). Hold the needle with the left hand and, **with its flat side to the right,** insert it into the needle clamp (**B**) as far as it will go. Then re-tighten the thumb screw.

To Thread the Needle

(See Fig. 5)

Turn the balance wheel until the lever (9) is at its highest. Place a reel of thread on the spool pin and pass the thread through the guide (10), down and from right to left under and between the tension discs (12), over the small spring (6) at left of the discs and under the slack thread regulator *(13). Then pass the thread up and from right to left through the hole in the lever (9), down into the eyelet (5), into the guide (7), and **from left to right** through the eye of the needle, leaving an end three or four inches long.

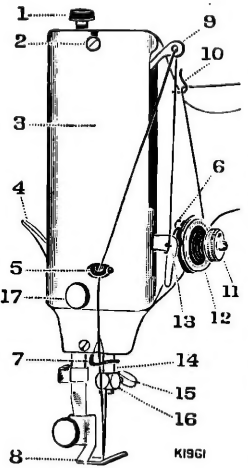


Fig. 5.

***NOTE—For darning and embroidery work, pass the thread through the hole in the slack thread regulator (13), instead of under it.**

To obtain best results it is absolutely necessary that the needle used be of the size stated for the number of cotton, linen or silk, as shown on inside of back cover. If rough or uneven thread is used, or if it passes with difficulty through the eye of the needle, the machine will not function satisfactorily.

The Singer Needle Threader saves time, trouble and patience, and is invaluable to those having defective sight.

To Take Out the Bobbin

Draw the slide (4, Fig. 6) to the left and press the forefinger of the right hand upon the bobbin ejector, as shown in Fig. 6. This will raise the bobbin so that it can be easily taken out.

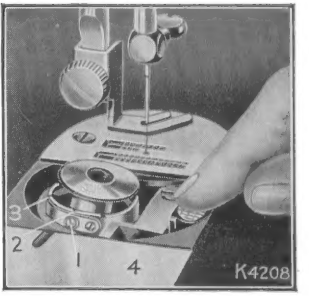


Fig. 6.

To Wind the Bobbin
(See Fig. 7)

Loosen the balance wheel (see Fig. 3) and place a reel of thread on the spool pin. Place an empty bobbin on the spindle (1) and turn the former until the hole in its right side engages the pin in the spindle shoulder. Now pass the end of thread through the guide (10, Fig. 5), up into the eyelet (5), into the notch (2) and, from the inside, through the hole in the left side of the bobbin. Hold the end of thread with the left hand and with the right press the pulley (6) against the ledge of the balance wheel until the latch retains the winder in position. Turn the balance wheel over towards you a few times, then break off the end of

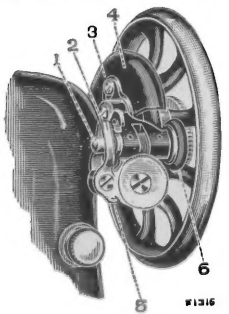


Fig. 7.

thread and again operate the machine. The winder stops automatically when the bobbin is full. Retighten the balance wheel for sewing.

If the pressure of the rubber ring against the ledge of the balance wheel is insufficient for winding the bobbin, loosen the screw (3) and press winder lightly until the pulley (6) is in contact with the ledge. Then retighten the screw. Afterwards push the latch to release the winder from contact with the balance wheel.

To Replace the Bobbin in the Bobbin Case

Take the bobbin between the thumb and forefinger of the left hand, with the end of the thread leading from the top to the left, and in this position replace it in the bobbin case, as shown in Fig. 8. Draw the thread into the slot (2, Fig. 6), back between the spring and the side of the bobbin case until it reaches the notch (3, Fig. 6), then across the bobbin and into the notch in slide (4, Fig. 6). Now close the latter.

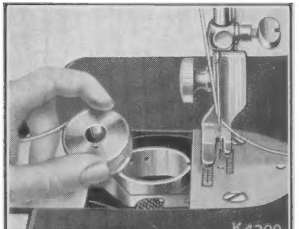


Fig. 8.

To Clean the Stitch-forming Mechanism

If the stitch-forming mechanism should become clogged with lint and interfere with the perfect operation of the machine, remove the bobbin case, as described in the following instructions, and dislodge the lint accumulated in the machine.

To Remove the Bobbin Case

(See Fig. 9)

Raise the needle to its highest point, and remove the slide (4, Fig. 6) by drawing it to the left as far as it will go and raising its front edge.

First remove the bobbin from the bobbin case, then insert the nail of the left forefinger under the latch "B." Raise the latter and draw it towards you on to the edge "A." Hold the bobbin case between the thumb and forefinger of the left hand, at the edge nearest the latch "B," as shown in Fig. 9, and lift it out towards you.

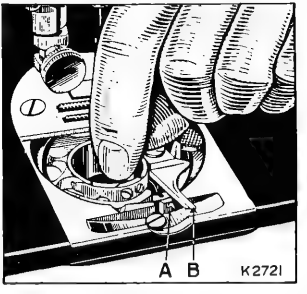


Fig. 9.

Under no circumstances must the screw in latch "B" be loosened, as this would put the stitch-forming mechanism out of adjustment.

To Replace the Bobbin Case

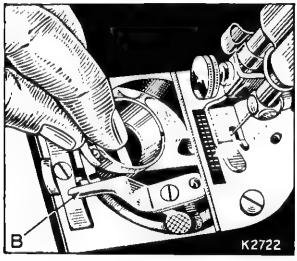


Fig. 10.

Raise the needle to its highest point, with the latch (B, Fig. 10) in the position illustrated. Hold the bobbin case between the forefinger and thumb of the left hand, at the edge farthest from the forked part (as shown in Fig. 10), and insert the latter beneath the throat plate so that the fork straddles the position stud ; then, with a slight twisting motion of the fork to the left and to the back, lightly press down the bottom case until the edge of the sewing hook engages in its groove.

Having correctly inserted the bobbin case, move the latch (B, Fig. 10) into the notch to hold the bobbin case in position, and then replace the slide from the right, as shown in Fig. 11, being careful to see that the two ends of the flat spring (A, Fig. 11) enter the grooves on the underside of the slide.

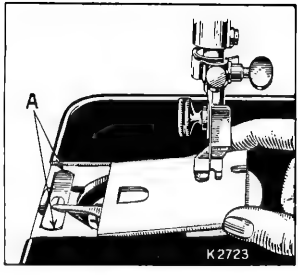


Fig. 11.

To Prepare for Sewing

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle. Turn the balance wheel over towards you for the needle to move down and up again to its highest. Pull the thread you are holding, and the under thread will be brought up with it through the hole in the throat plate, as shown in Fig. 12. Place both ends of thread under and to the back of the presser foot.

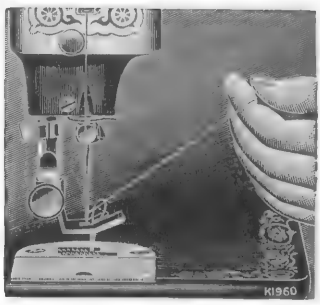


Fig. 12.

To Commence Sewing

Place the material to be sewn beneath the presser foot, lower the latter, and commence to sew by turning the balance wheel over towards you.

NOTE.—Do not try to help the feeding of the work by pulling the material, as this may deflect the needle and cause it to break. The machine feeds without any assistance.

To Remove the Work

Raise the take-up lever (9, Fig. 5) to its highest and lift the presser foot (8, Fig. 5). Move the material back and to the left, and sever the threads by passing them over the thread cutter above the presser foot. Leave the ends of the threads a few inches long under and at the back of the presser foot.

To Regulate the Tensions (See Fig. 13)

Correct Stitch.

For ordinary stitching, the tension on the upper and under threads should be equal, so as to lock both threads in the centre of the work, as above.

If either tension is stronger than the other, imperfect stitching will be the result thus:

Needle thread tension too strong.

Needle thread tension too weak.

Fine fabrics require a light tension, while heavy materials want more tension to obtain a perfect stitch.

The tension on the needle thread should be regulated only when the presser foot is down.

A correct stitch can usually be obtained by varying the tension on the needle thread (see Fig. 13).

Fig. 13.

Lower the presser foot and turn the thumb nut in the direction illustrated by the arrow to increase the tension or in the opposite direction to lessen it.

As all machines are correctly adjusted before leaving the factory, the under tension seldom requires to be altered, but if this becomes necessary tighten the screw (1, Fig. 6) in the spring on the outside of the bobbin case to increase the tension, or loosen it slightly to lessen the tension.

Always use thread with corresponding size of needle as per Table on page 3 of cover.

To Alter the Length of Stitch

(See Fig. 14)

To lengthen the stitch, turn the thumb screw over to the right; to shorten the stitch, turn the thumb screw over to the left.

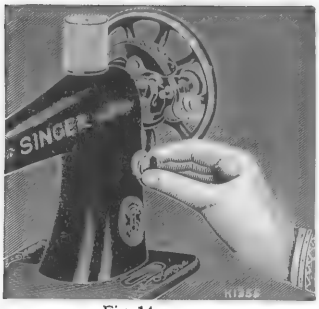


Fig. 14.

To Change the Pressure on Material

For ordinary family sewing it is seldom necessary to change the pressure on the material. If sewing fine silk or flimsy material, lighten the pressure by giving the thumb screw (1, Fig. 5) two or three turns upwards. To increase the pressure, give the thumb screw a few turns downwards.

To Turn a Corner

Stop the machine when the needle is rising but still in the material. Raise the presser foot and turn the work, using the needle as a pivot. Then lower the presser foot.

To Sew Flannel or Bias Seams

Use a short stitch and as light a tension as possible, so that the stitching will be loose enough to stretch with the goods.

To Oil the Machine

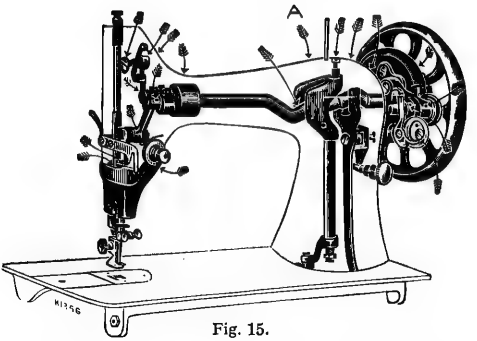


Fig. 15.

To ensure easy running the machine requires to be oiled so that all moving parts in contact are covered with a film of oil. **These should never be allowed to become dry.**

If used constantly, the machine should be oiled daily, while with moderate use, an occasional oiling is sufficient. A drop of oil applied at the points indicated by arrows in Figs. 15 and 16, is sufficient. To oil the needle bar mechanism, remove the face plate (3, Fig. 5) by taking out the thumb screw (17, Fig. 5) and loosening the small screw (2, Fig. 5). **It is most important that oil be applied to point "A" Fig. 15 when the take-up lever (9, Fig. 5) is at its lowest.** There are also two holes in the hand attachment to which oil should be applied occasionally. When oiling, insert the oil can spout well into the oil holes. Apply a drop of oil to the small piece of felt lubricating the oscillating hook and to the rollers at the right of the hook shaft.

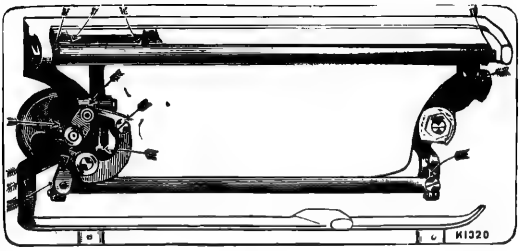


Fig. 16.

After oiling, run the machine rapidly for a few minutes so that the oil may reach the bearings. **Neglect to oil the machine will shorten its life and cause you trouble and annoyance.**

Always use Singer oil. Inferior oil clogs the bearings, prevents efficient working, and causes rapid wear of the mechanism.

HINTS

Machine working heavily. If the machine runs hard after being idle, oil with paraffin. Then run rapidly, wipe clean and oil with Singer Oil.

Needles Breaking. See that the needle is not bent, the upper tension is not too tight, and the presser foot or attachments are securely fastened. Avoid pulling the material and do not sew heavy seams or thick goods with too fine a needle (see table on inside of back cover).

Thread Breaking. If the needle thread breaks, see that :

The machine is properly threaded.
The upper tension is not too tight.
The needle is not bent, blunt or set incorrectly.
The thread is not too coarse for the needle (see table on inside of back cover).
The thread take-up spring (6, Fig. 5) is not broken.

Should the under thread break, loosen the under tension (see page 12), and see that the bobbin case and under the tension spring are free from fluff.

Skipping of Stitches. See that the needle is correctly set (see page 5), is not blunt, bent, or too fine for the thread.

Stitches Looping. See that the spring (6, Fig. 5) is not broken, that the upper and under tensions are equal (see page 12), that both bobbin case and needle are properly threaded, that the thread is of good quality and of correct size for the needle (see table on inside of back cover).

Material Puckering. See that both tensions are equal.

INSTRUCTIONS

FOR USING

ATTACHMENTS

WHICH MAY BE APPLIED TO

SINGER MACHINES

No. 99

NOTE.—To obtain the best results from the attachments, the machine should be fitted for electric drive. (*See page 2 of this book.*)

Before applying any of these attachments raise the needle and remove the presser foot. After substituting the attachment turn the balance wheel slowly over towards you to make sure that the needle passes through the centre of the needle hole.

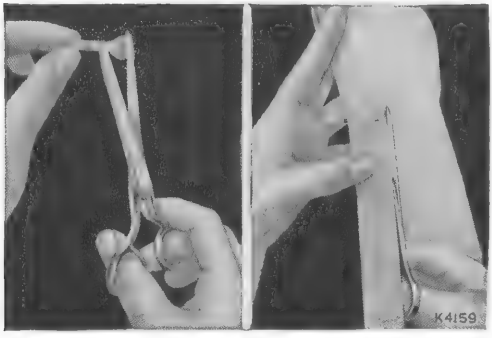
Darning by sewing machine is infinitely neater, stronger, and more quickly done than by hand.

A tiresome task becomes a pleasure!

Read how to do this in separate pamphlet, Form 1001 ad 33, which may be obtained free from any Singer Shop or Singer Salesman.

Bias Gauge

The Bias Gauge will be found very useful (especially in the case of soft materials) when cutting bias strips from $\frac{7}{16}$ inch to $1\frac{3}{8}$ inches in width. This may



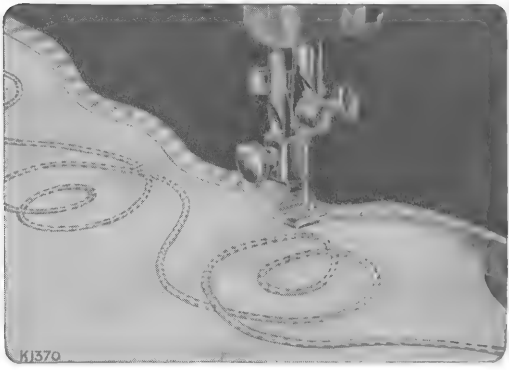
be done by placing the bias gauge upon the point of the scissors and setting the blued indicator to the width desired. The line F is the point at which to set the blued indicator for facings, the line B for binding, and the line C for cording or piping.

Insert the material in the gauge with the edge against the blued indicator, and hold as shown above.

Bias binding for use with the Binder Attachment should be cut $\frac{15}{16}$ inch wide, and to do this the indicator should be set midway between the lines F and B.

The Binder—Binding

Pass the binding through the scroll of the binder and draw it under the needle. Place the edge of the material to be bound between the scroll of the



binder and under the needle, lower the presser-bar lifter and sew as usual.

Bias binding should be cut $\frac{15}{16}$ of an inch wide.

To Bind with Dress Braid.—Proceed as when using bias binding; but as dress braid and binding purchased already folded are narrower than bias binding they should be inserted in the outer slot of the binder. The edges of dress braid are not turned under as in the case of bias binding.

To make French Folds.—Proceed as directed for binding, but pass the cloth beneath the binder-foot, so that the fold is stitched on to the face of the material instead of on the edge.

The Adjustment and Operation of the Binder

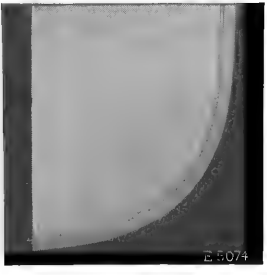
The edge to be bound should be held well within the centre slot of the scroll, and with a little practice this is quite easy. If the material is allowed to slip away from the scroll when near the needle, the edge will not be caught in the binding.

Various materials and conditions require different adjustments of the Binder to bring the stitching close to the edge. A wider adjustment of the Binder is necessary when binding curves than when binding a straight edge.

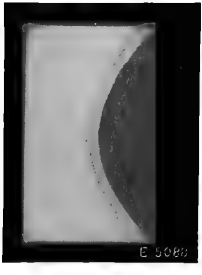
To adjust the Binder, loosen its small screw and move the scroll to the right for a narrower adjustment or to the left for a wider adjustment, after which securely tighten the screw. To become perfectly familiar with the adjustment of the Binder, a little practice is necessary.

Binding Outside Curves

Practice is required to bind a curved edge properly. The edge to be bound must be allowed to pass freely



Sample of Outside Curve.



Sample of Inside Curve.

through the scroll and should not be crowded in or against it. Guiding should be from the back of the binder and to the left, allowing unfinished edges to swing naturally into the scroll of the binder.

Never pull the binding as it feeds through the Binder, as bias material is very easily stretched and would be too narrow when it reaches the needle. If this occurs the edges will not be turned.

When binding a curved edge, turn the material only as fast as the machine sews. It is not possible to hold the material in the entire length of the scroll when binding a small curve.

Do not push the material in too fast, as the edge will then become puckered, and do not stretch the material or the curve will not be the proper shape when finished. If the stitching does not catch the edge of the binding the scroll should be adjusted a little to the left.

Binding Inside Curves

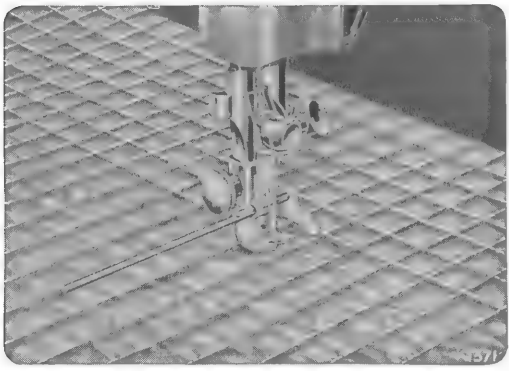
This curve is found on nearly all garments which are finished with a bound edge, but practice is necessary on various materials.

When binding an inside curve, straighten out the edge as it is being fed into the Binder. When doing this, take care not to stretch the edge of the material.

If the material is soft, like batiste or crepe de chine, add a row of machine stitching close to the edge of the curve before binding.

The Quilter

The quilter guide can be used at either the right or left of the needle, and the distance of the guide

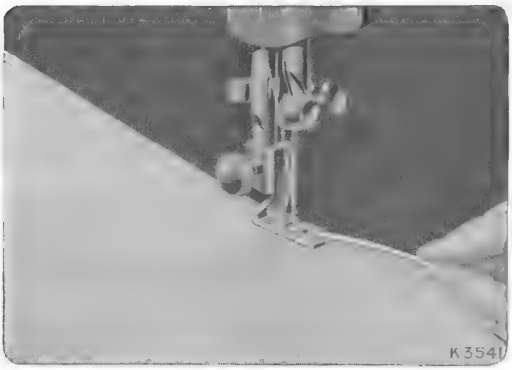


from the needle determines the width between the rows of stitching. Slide the wire into its holder on the foot, and set it to the width desired; then lower the foot on to the material.

To Quilt.—For the first row of stitching, let the quilter guide follow the edge of the material, a straight crease, or a line, as preferred. Succeeding rows are made straight and at a uniform distance by keeping the previous row steadily under the guide, as shown.

The Foot Hemmer—Hemming

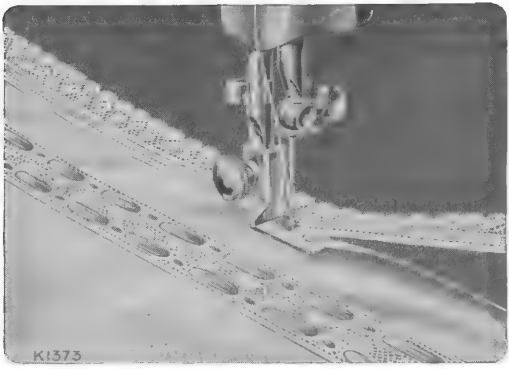
Clip off the right hand corner of the material for its edge to curl easily. Then, with the hemmer foot



raised, place the material from left to right under the foot and, with its edge slightly raised, insert the corner into the mouth of the hemmer, easing it along until it fills the curl and reaches the needle. Lower the foot and make the first few stitches slowly. Guide the material with the thumb and forefinger so that the edge lies flat over the top of the hemmer, and proceed to sew, taking care to keep the hemmer curl just full. Should the edge begin to run out, move the hand to the left; should too much material run in, move to the right.

Hemming and Sewing on Lace in One Operation

Start the hem, as explained on page 23, and, when it is well started, raise the needle to its highest

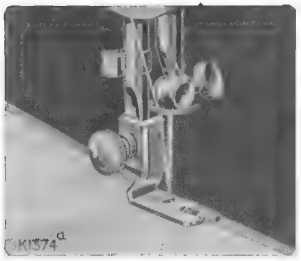


point. Raise the hemmer to relieve the pressure on the hem, and pass the end of the lace through the slot in the side of the attachment and over the hem, as shown.

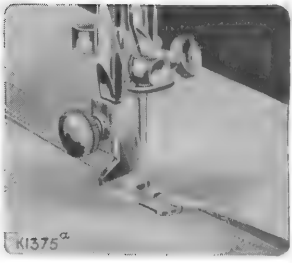
Take care that the hem is not displaced in the hemmer, and that the needle goes through both lace and hem. Then let down the presser bar, and guide the lace over the front of the hemmer, taking care to keep it well into the slot.

The Foot Hemmer—Felling

The two pieces of cloth should be laid, wrong side out, one over the other, with the edge of the under piece a little farther to the right than the upper piece, as shown in the illustration. Stitch the two pieces together, using the front projecting part of the hemmer as a guide for keeping the seam straight. This should be made close, but not too near to the edge of the upper piece, or the cloth will give way at the seam when a strain is put upon it.

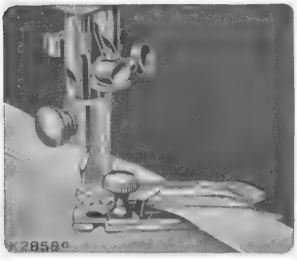


Raise the hemmer foot and open the work out flat, wrong side up, so that the edges will stand up straight. Then push the edges at the beginning of the seam into the mouth of the hemmer, as far as the needle, and lower the hemmer foot. While stitching, keep the material perfectly flat, using both hands, and see that the seam is in line with the mouth of the hemmer. For the second seam, the stitch should be lengthened slightly.



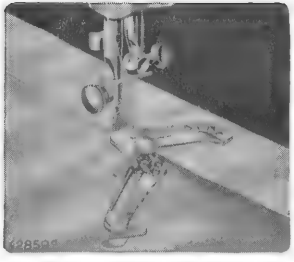
The Adjustable Hemmer

With its slide closed, see top illustration, the attachment will make hems up to one inch wide.



Loosen the screw at the front and move the slide until the pointer is against the desired width, then tighten the screw. Insert the edge of the material between the slide and the number gauge, and draw it backward and forward until the hem is formed, stopping with its end under the needle. Lower the presser bar and sew, taking care in guiding the work to keep the hemmer full. Felling can also be done by following the instructions on page 25.

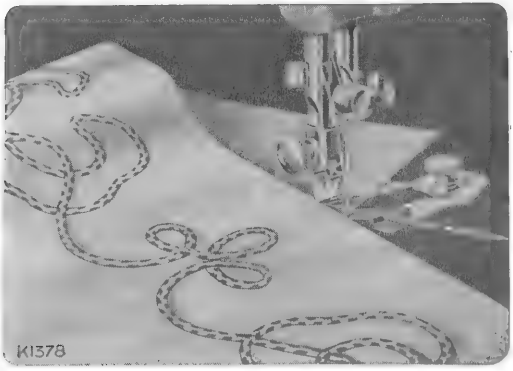
To make a hem more than one inch wide, loosen the screw, draw the slide to the right as far as it will go, and turn it towards you, as in the bottom illustration. Fold and crease down a hem of the desired width, pass the fold under the extension at the right of the hemmer, then insert the edge of the material into the folder, and proceed to sew.



The Under Braider—Braiding

Fit the quilter foot, as shown.

To attach the under braider, insert the downwardly projecting hook of the attachment into the

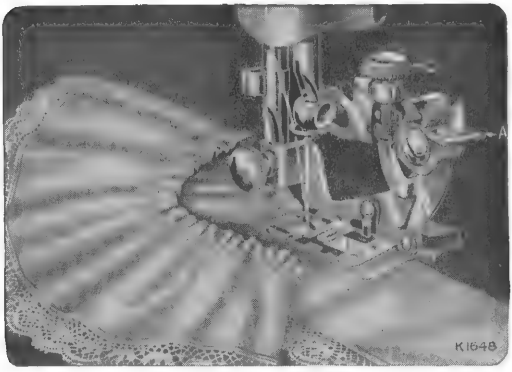


hole in the throat plate at the right of the feed dog. Then place the guide thumb screw in the slot of the attachment and into the hole in the bed plate of the machine. The under braider must be firmly secured by tightening the screw.

The pattern or design to be braided must be stamped or traced on the wrong side of the material. Pass the braid from the left between the blued guide and the lower plate until it enters the back and front braid guides, and then under the needle. Place the material, wrong side up, above the braid, lower the presser foot and proceed to sew, following the lines of the design.

The Ruffler—Ruffling

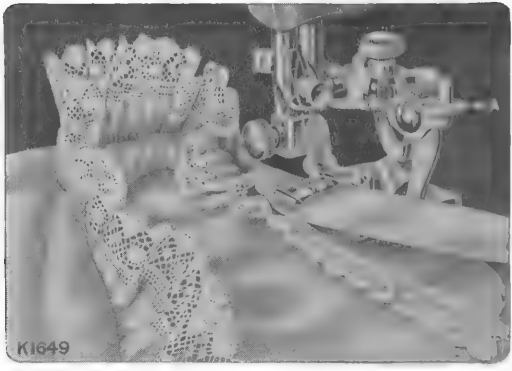
Attach the ruffler, taking care to connect the lever with the needle clamp, as shown.



To make a gather at every stitch, insert the small post into slot 1 of lever "**A.**" Pass the edge of the material under the prong at the front of the ruffler and between the two blued blades until it is slightly past the needle ; lower the presser bar lifter and proceed to sew. To make a finer gather, shorten the stitch, and shorten the stroke of the ruffling blade by raising the thumb screw "**C.**" To make a fuller gather, lower the thumb screw and lengthen the stitch. By varying these adjustments, many pleasing varieties of work can be accomplished with the ruffler.

The Ruffler –
Ruffling between Two Pieces of Material

Place the lower piece of material below the ruffler. Insert the piece to be ruffled in the ruffler,



as instructed on the preceding page, and pass the upper piece of material above the blued blades in the manner illustrated.

To Ruffle and Sew on at One Operation

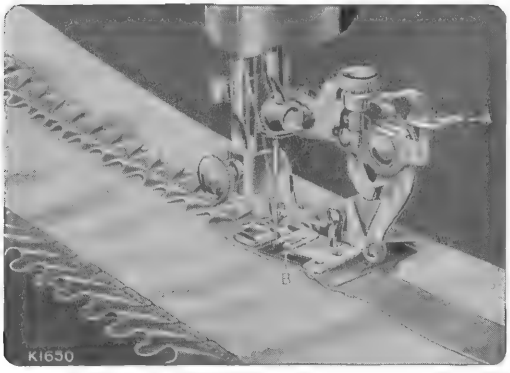
Place the material below the ruffler, and the piece to be ruffled between the blued blades ; then proceed as in ruffling.

Apply a little oil to the wearing parts of the ruffler before using.

CAUTION.—The ruffler should never, under any circumstances, be operated without cloth between the blued blades.

Five-stitch Ruffling or Pleating

To make a five-stitch ruffle or pleat, insert the small post into slot 5 of lever "**A**," as shown. The ruffling blade will then move forward and

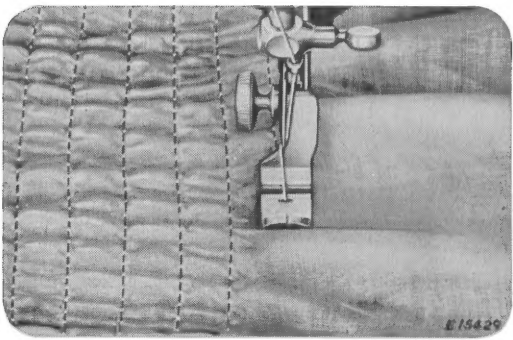


back once at every fifth stitch. Finer or fuller pleats may be obtained by merely altering the length of stitch.

To make Pleated Trimming.—Insert a narrow tape or ribbon through one or both of the slots in the small guide "**B**" and beneath the presser and needle, so that it lies centrally over the material to be pleated.

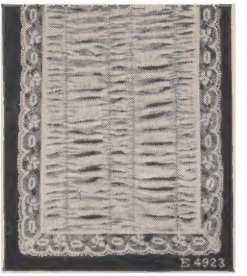
Shirring with the Gatherer

Material placed under the gatherer and stitched in the usual way will be slightly gathered. Any fabric that drapes well is especially suited for



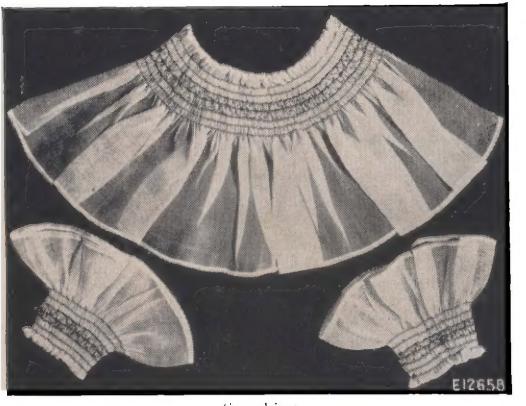
shirring with the gatherer, generally with a long stitch and tight tension. To increase the fullness of the gathers, lengthen the stitch. To decrease the fullness, shorten the stitch.

With the gatherer, it is possible to shirr in narrow rows as shown above. The material may be guided as easily as when sewing with the presser foot. Fine materials, such as batiste, silk or net, may be very attractively shirred. Where only a slight fullness is required, as at the top of a sleeve or around the neck, the gatherer will be found very convenient.



Shirring.

A very pleasing effect may be gained by using thread or embroidery silk of contrasting colour on the bobbin. Illustrated below is a white organdie collar and cuff set with red and green smocking made with the gatherer, using fine crochet cotton or tatting thread on the top and white cotton on the bobbin.



Smocking.

RELATIVE SIZES OF NEEDLES AND THREADS

(Class and Variety of Needles used 15x1)

Sizes of Needles	CLASS OF WORK TO SEW	Sizes of Cotton, Linen or Silk
9	Very thin Muslin, Cambric, Linen, etc.	100 to 150 Cotton. 30 Silk.
11	Very fine Calicoes, Linens, Shirtings, Fine Silk Goods, etc.	80 to 100 Cotton. 24 to 30 Silk.
14	Shirtings, Sheetings, Bleached Calicoes, Muslins, Silk and General Domestic Goods.	60 to 80 Cotton. 20 Silk.
16	All kind of heavy Calicoes, Light Woollen Goods and Heavy Silk.	40 to 60 Cotton. 16 to 18 Silk.
18	Tickings, Woollen Goods, Trousers, Boys' Clothing, Corsets, Cloaks, Mantles, etc.	30 to 40 Cotton. 10 to 12 Silk.
19	Heavy Woollens, Tickings, Bags, Heavy Coats, Trousers, etc.	24 to 30 Cotton. 60 to 80 Linen.
21	Bags, Coarse Cloths, Heavy Goods of any texture.	40 to 60 Linen, or very coarse Cotton.

In sending orders, always specify the size required.

This Trade Mark is on the Arm of every Singer Sewing Machine.